

requires much space. When in use or when being stored, typically, it requires less than one cubic foot of space when stacked in the storage mode as shown in Figure 1. In the processing mode, it has a 12 by 16 inch footprint.

While the apparatus and methods herein disclosed form a preferred embodiment of this invention, it will be understood that this invention is not so limited, and changes can be made without departing from the scope and spirit of this invention, which is defined in the appended claims.

I CLAIM:

1. A coffee extraction unit for making a batch of concentrated coffee extract, comprising:

Means for heating a predetermined volume of water used in making the coffee extract;

A dispensing vessel for heating said predetermined volume of water to a temperature range between 165-210° F, said dispensing vessel having a drain orifice and a means for valving said orifice, whereby when said valving means is in an open position, said heated water is allowed to drain through said orifice, which said orifice is sized to allow a rate of flow between 400 and 800 milliliters per minute;

A heating element assembly for bringing water to boil in said dispensing vessel

A coffee basket for receiving a predetermined volume of ground coffee therein, said dispensing vessel superimposed on top of said coffee basket such that heated water from said dispensing vessel is received into said basket to saturate said coffee grounds, said coffee basket having at least one bottom opening to pass the heated water through said basket;

An extraction vessel for producing the coffee extract therein, said extraction vessel constructed to receive said coffee basket therein such that heated water passed through said coffee basket is retained within said extraction vessel, whereby said saturated coffee grounds within said coffee basket are allowed to steep within said extraction vessel for a predetermined period of time, thereby producing a concentrated coffee extract within a

relatively oxygen-free closed environment that maintains the escape of volatile coffee flavor and aromatic components and means for filtering the concentrated coffee extract.

2. The coffee extraction unit of Claim 1, wherein said predetermined period of steeping time is 6 to 10 minutes.

3. The coffee extraction unit of Claim 1, further including a removable storage vessel for receiving filtered coffee extract therein, said storage vessel having a movable float in the form of a lid for protecting said filtered extract from the atmosphere so as to prevent oxidation and escape of volatile coffee flavor and aromatic components from said extract, thereby prolonging coffee extract flavor and shelf life.

4. The coffee extraction unit of Claim 1, wherein said filtering means traverses said at least one bottom opening of said coffee basket.

5. The coffee extraction unit of Claim 4, wherein said filtering means is integrally formed into a bottom floor of said coffee basket, thereby covering said at least one bottom opening of said coffee basket.

6. The coffee extraction unit of Claim 4, wherein said filtering means is comprised of a removable filter ring that is in resting contact on the bottom floor of said coffee basket, thereby covering said at least one bottom opening of said coffee basket.

7. The coffee extraction unit of Claim 1, wherein said dispensing vessel further includes a check valve assembly formed into a base of said vessel, check valve assembly comprised of a valve body having a top surface and a vertical oriented passageway extending through said valve body and said base of said dispensing vessel, said passageway covered by a hinged valve gate that operates between a closed and open position, said gate normally closed to prevent atmospheric air from entering said passageway, said hinged valve gate opening to allow gasses and steam created in said extraction vessel during the extraction process to exit through said passageway.

8. A process for making a concentrated coffee extract, comprising the steps of:

Placing a predetermined volume of ground coffee into a provided basket having a bottom opening therein;

Placing said basket into a provided extraction vessel, and then adding a predetermined volume of heated water at a controlled rate of flow to said basket, so as to saturate said coffee grounds;

Enclosing said vessel from the atmosphere;

Steeping said saturated coffee grounds for a predetermined period of time within said extraction vessel, thereby producing said coffee extract.

9. The process of Claim 8, wherein said predetermined volumes of coffee and water form a ratio, said ratio being between 1:4 and 1:7 by weight.

10. The process of Claim 8, wherein said flow rate of said water is between 400-800 milliliters per minute.

11. The process of Claim 1, wherein said predetermined temperature is between 165-210°F.

12. The process of Claim 11, wherein said water and coffee grounds undergo a form of pasteurization, whereby any bacteria and mildew spores are killed.

13. The process of Claim 8, wherein said predetermined period of steeping time is between 6 to 10 minutes.

14. The process of Claim 8, wherein said step of steeping releases carbon dioxide gas retained within said coffee grounds into the atmosphere, and flavor enhancing colloids and oils within said coffee grounds into extraction water.

15. The process of Claim 8, wherein the step of enclosing said coffee basket, extraction vessel by superimposing said dispensing vessel to said coffee basket to cover the vessel so as to eliminate exposure to atmospheric air.

16. The process of Claim 1, further comprising the step of providing a dispensing vessel for receiving said heated water therein prior to said water being dispensed into said coffee basket, said dispensing vessel provided with a check valve assembly that opens to allow the heated water to flow into said basket at said predetermined rate of flow.

17. The process of Claim 16, wherein said check valve assembly is comprised of a bimetal disk member having an elastomeric pad attached to said disk member and at least two valve retainer members for holding said disk member, each retainer member

attached to a base of said dispensing vessel and disposed about a centrally located drain hole formed in the base of said dispensing vessel.

18. The process of Claim 8, further comprising the step of providing a filtering means to filter said coffee extract.

19. The process of Claim 8, wherein the filtering means is provided within said basket and is integrally formed as a part of a bottom floor thereof.

20. The process of Claim 18, wherein the filtering means is a separate member inserted into said basket so as to rest on the bottom floor thereof.

21. The process of Claim 8, further including the step of draining the coffee extract from the extraction vessel into a storage container, said storage container provided with a float therein for reducing exposure of said coffee extract to the atmosphere.

22. The coffee extraction unit of Claim 1 further includes a diffuser plate attached to the bottom floor of said dispensing vessel, said diffuser plate functioning to uniformly dispense said heated water over said coffee grounds.